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COMMERCIAL FERTILIZERS

By JOHN S. BURD

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COMMERCIAL FERTILIZERS.

By JOHN S. BURD.

The State provides every facility for protecting the fertilizer consumer. Manufacturers and dealers residing in the State are compelled to furnish guaranties showing the actual composition of all goods sold. Any consumer may verify such a guaranty by having an analysis made in return for a nominal fee. Further than this, large numbers of free analyses are made, of so-called "purchaser's samples," for the information of the public and in order to determine the character of the goods actually being delivered to fertilizer consumers. This class of analyses is not prescribed by law. There is even some doubt as to whether it is permitted by the terms of the Fertilizer Act. Those in charge of the administration of the Act believe, however, that such a service is justifiable in all cases where the State has jurisdiction over the seller; inasmuch as the information so obtained is used to raise the standard of the fertilizers being sold.

The provisions of the Fertilizer Act cannot, however, be construed to cover sales of fertilizers made by non-residents directly to consumers within the State. Such sales are usually made by brokers who draw their materials from the most diverse and distant sources. Proper tagging of the goods sold is in many cases out of the question. It is difficult to see how the mere publication of the analyses of such unregistered and frequently untagged goods can be of any value to the fertilizer consumers of California. The only one to profit by such an analysis is the particular consumer who has received the service and its value to him is merely the cost of an analysis by a commercial chemist.

It may very pertinently be pointed out that the Fertilizer Control is supported by the taxes levied on registered manufacturers and dealers. These, of course, ultimately come from the purchasers of registered fertilizers. The purchaser of unregistered fertilizers pays neither directly nor indirectly one cent towards the support of this service. He therefore has no rights, to be considered, when his immediate personal interests conflict with those of purchasers of registered goods.

By making analyses of imported, unregistered fertilizers, the Fertilizer Control is encouraging a practice which is inimical to the best interests of the fertilizer consuming public. On this ground and because of its unfairness to registered manufacturers and dealers, analyses of unregistered fertilizers sold by parties over whom the State of California has no jurisdiction have heretofore been refused by the Fertilizer Control.

The whole matter of the importation of unregistered goods is worthy of the earnest consideration of all fertilizer consumers. It is believed that the tendency of such importations is to break down the necessary restrictions insuring high standards in the quality of fertilizers. To properly appreciate this it should be understood that this Department depends for results, not so much upon its limited and inadequate powers of prosecution, as upon the publication of the comparative analyses and guaranties. If large quantities of unregistered fertilizers continue to be imported directly by consumers, it may soon prove difficult to convince local manufacturers of the value of a good showing for their various brands.

The framers of the Fertilizer Control Act supposed that the inspection of fertilizers found in the warehouses of manufacturers and dealers, by establishing the character of the various brands under which fertilizers are sold, would be sufficient protection for fertilizer purchasers. This is the method followed in many states, but it does not take into consideration some of the present methods of purchase of fertilizers in California. Here a large and constantly increasing class of fertilizer consumers is buying strictly upon the unit plan, usually upon the basis of the analysis furnished by this Department. For their protection it is doubtful if any system of tagging is either necessary or desirable. They are amply protected by their contracts with the manufacturer and pay for exactly what they get. On the other hand, the consumer who buys on the reputation of a brand, still exists and will doubtless continue to exist for a long time to come. For his protection proper registration and tagging is absolutely essential.

FRUIT ASSOCIATIONS AS FERTILIZER DEALERS.

Members of the various citrus fruit associations have doubtless been among the greatest beneficiaries of the Fertilizer Control Act. Probably the passage of the Act was largely due to their efforts. At any rate they have, properly enough, not been slow to take advantage of its privileges. The increase in the consumption of fertilizers has resulted in many of the associations going into the business of selling

such materials. Some of these associations have taken the ground that in buying for their members only they are exempt from the restrictions applying to dealers, and have accordingly imported unregistered fertilizers for distribution. It may be definitely stated that this contention has no legal foundation, and that members procuring fertilizers from their associations are entitled to the same protection they would have in buying from other dealers. Associations handling unregistered fertilizers are consequently subject to the penalties prescribed for violations of the Fertilizer Act.

BREAD OUT OF STONE.

A Warning to Fertilizer Purchasers.

During the past year a number of attempts have been made to induce farmers of certain sections of the State to purchase fine ground rock and sand as fertilizers. In some cases these attempts have been successful and innocent purchasers have been defrauded to the extent of their outlay.

As an aid to their operations, the exploiters of this fake have issued anonymous circulars entitled, "What Will Fertilizing With Stone Dust Accomplish," "Will Fertilizing With Stone Meal Pay?" If by "Stone Meal" and "Stone Dust" they mean the worthless materials they have been selling and of which this Department has made analyses, we cheerfully answer these questions. Fertilizing with "Stone Dust" will accomplish *nothing*. Fertilizing with "Stone Meal" certainly will not pay!

In view of the above facts all fertilizer consumers are warned against the purchase of such materials.

REGISTERED MANUFACTURERS AND DEALERS.

The following manufacturers and dealers in commercial fertilizers have obtained certificates of registration under the provisions of the California Fertilizer law, for the fiscal year beginning July 1, 1908. A list is also given of the brands of fertilizers and fertilizer materials offered by them for sale. According to the sworn returns of dealers registered for the fiscal year ending June 30, 1908, their entire sales in the State amounted to 31,228 tons.

No dealer or manufacturer, except those who have certificates of registration from the University of California, and their authorized agents, can legally sell fertilizers in this State. No person or company has any right to use any registration number except in connection with the firm name to which the registration certificate of such

number has been issued; and no person or company to whom a registration number has been assigned has any right to give any other person or company permission to use said registration number, and any number so used is a fraud. No agent has any right to use his principal's registration number in connection with his own name.

Agricultural Chemical Works, Los Angeles, Cal.

Registration No. 8.

Apricot.	Special Orange and Lemon for
Bat Guano.	Heavy Soil.
Bat Guano and Bone.	Special Orange and Lemon for
Bat Guano and Gypsum.	Light Soil.
Blood.	Special Orange and Lemon for Non-
Bone Meal.	fruiting Trees.
Grape and Berry.	Olive.
Gypsum.	Potato.
Lawn and Rose.	Prune and Peach.
Muriate of Potash.	Sulfate of Potash.
Nitrate of Soda.	Superphosphate.
Orange and Lemon.	Tankage.
Special Orange and Lemon.	Vegetable.
	Walnut and Almond.

Special mixtures to order of consumers.

American Agricultural Chemical Co., California Works, Los Angeles, Cal.

Registration No. 1.

Acid Phosphate.	Nitrate of Soda.
Bat Guano.	Nursery Stock.
Blood.	Orange and Lemon.
Fruit and Vine.	Special Fruit and Vine.
Ground Bone; Raw and Steamed.	Sulfate of Potash.
Lawn.	Special Brands to Order.
Lemon Tree.	Vegetable.

The Armour Fertilizer Works, Los Angeles, Cal.

Registration No. 7.

Acidulated Bone Meal.	Lawn and Garden Fertilizer.
Bone Meal.	Nitrate of Soda.
Bone Flour.	Orange Tree Manure.
Bone, Blood and Potash.	Pea Special.
Dried Blood.	Special 5-8-2.
Flower and Fern Food.	Sulfate of Ammonia.
Fruit Special.	Sulfate of Potash.
Fruit and Vine.	Superphosphate.
Guano.	Tankage.

Special mixtures to order of consumers.

Balfour, Guthrie & Co., San Francisco, Cal.

Registration No. 10.

Nitrate of Soda.	Thomas Phosphate Powder.
Sulfate of Potash.	

F. W. Braun, Los Angeles, Cal.

Registration No. 35.

Acid Phosphate.	Sulfate of Ammonia.
Muriate of Potash.	Sulfate of Potash.
Nitrate of Soda.	Superphosphate.

California Fertilizer Works, Inc., San Francisco, Cal.

Registration No. 3.

Fruit and Vine.	Orange Tree (B).
Fruit, Orange and Vine.	Special Orange Tree.
High Grade Ammoniated Bone Superphosphate.	Peach.
High Grade Bone Meal.	Special Fertilizer with Iron Sulfate.
Hop.	Special Fertilizer.
Lemon Tree (M).	Special Orange and Lemon.
Nursery Stock.	Special Phosphate and Potash.
Odorless Lawn Dressing.	Special Sugar.
	Truck and Berry.

F. B. Carlisle Co., Port Angeles, Wash.

Registration No. 36.

Ground Whale Bone.	Wilgrow.
Whale Guano.	

Cudahy Packing Co., South Omaha, Neb.

Registration No. 16.

Tankage, otherwise designated Blood and Bone.

Glendora Citrus Association, Glendora, Cal.

Registration No. 43.

Tankage.	Sulphate of Potash.
Nitrate of Soda.	

The Hauser Packing Co., Los Angeles, Cal.

Registration No. 33.

Ground Tankage.	Dried Blood.
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Hawaiian Fertilizer Co., Ltd., San Francisco, Cal.

Registration No. 19.

Blood.	Sulfate of Potash.
Fish Guano.	Superphosphate.
Muriate of Potash.	Thomas Phosphate.
Nitrate of Soda.	Tankage.

Special mixtures to order of consumers.

R. A. Holcombe & Co., San Francisco, Cal.

Registration No. 27.

Diamond "H" Nitrate of Soda.

Simon Levy, Los Angeles, Cal.

Registration No. 37.

Fertilizer Mixture No. 1.

Thomas Lewis, Sacramento, Cal.

Registration No. 40.

The Tom Lewis Fertilizer.

Los Angeles Fertilizer Co., Los Angeles, Cal.

Registration No. 38.

Hanson's Odorless Lawn Fertilizer.	L. A. Tankage.
L. A. Bone Meal.	Nitrate of Soda.
L. A. Fruit Grower.	Sulfate of Potash.
L. A. Garden and Lawn Fertilizer.	Superphosphate.
L. A. Special Fruit Grower.	Tankage.

Special mixtures to order of consumers.

Mapes Formula and Peruvian Guano Co., New York.

J. J. Prendergast, Redlands, agent.

Registration No. 12.

Mapes Fruit and Vine Manure.	Mapes Orange Tree Manure.
Mapes Vegetable Manure.	

Morris & Co., Chicago.

W. B. Burr, 307 Central Bldg., Los Angeles, Agent.

Registration No. 26.

Pacific Big One.	Pacific Big Six.
Pacific Big Two.	Pacific Big Seven.
Pacific Big Three.	Pacific Big Eight.
Pacific Big Four.	Ground High Grade Blood.
Pacific Big Five.	

The Mountain Copper Co., San Francisco, Cal.

Registration No. 28.

Mococo. Superphosphates.	Nitrate of Soda.
Mococo. Mixed Fertilizers of various compositions.	Sulfate of Potash.

Special mixtures to order of consumers.

Mutual Orange Distributors, Redlands, Cal.

Registration No. 39.

Blood.	Mutual Special.
Bone Meal.	Nitrate of Soda.
Mutual No. 1.	Tankage.
Mutual No. 2.	

Special mixtures to order of consumers.

S. M. Neely, San Diego, Cal.

Registration No. 20.

Bird Guano.

Oakland Meat and Packing Co., Stock Yards, Cal.

Registration No. 24.

Special Fertilizer.

Pacific Bone, Coal and Fertilizing Co., San Francisco, Cal.

Registration No. 14.

Bone Meal.	Muriate of Potash.
Ceres Brand.	Nitrate of Soda.
Ceres No. 2.	Pomona Brand.
Citrona Brand.	Pure Dissolved Bone Meal.
"Flora" Brand.	Sulfate of Potash.
Lupine Brand.	Thomas Phosphate Powder.

Special mixtures to order of consumers.

Pacific Guano and Fertilizer Co., San Francisco, Cal.

Registration No. 4.

Dissolved Bone Superphosphate.	Special Phosphate and Potash.
Raw Bone Meal.	Sulfate of Ammonia.
Steamed Bone Meal.	Sulfate of Potash.
Double Manure Salt.	Superphosphate.
Dried Blood.	Double Superphosphate.
Fish Scrap.	Tankage.
(F) Fruit and Vine	Thomas Phosphate Powder.
(G) Grape Fertilizer.	Basic Superphosphate No. 1 Cresco.
Kainit.	Basic Superphosphate No. 2 Cresco.
Lawn Dressing.	(GG) Grain Grower.
Muriate of Potash.	(PNK) Phosphorus, Nitrogen and
Nitrate of Soda.	Kalium.
(N) Nursery Stock.	Standard Acid Phosphate "Cresco."
(O) Orange and Lemon.	

Special mixtures to order of consumers.

Redlands Fruit Association, Redlands, Cal.

Registration No. 34.

Bone Meal.	Sulfate of Potash.
Dried Blood.	Tankage.
Nitrate of Soda.	

Carroll B. Smith, Redlands, Cal.

Registration No. 25.

Blood.	Sulfate of Potash.
Bone.	Nitrate of Soda.
Guano.	Tankage.

Special mixtures to order of consumers.

Southern California Fertilizer Co., Los Angeles, Cal.

Registration No. 42.

Southern California Orange.	Southern California Root and Tuber.
Southern California Orange and Lemon.	Southern California Pea and Vetch.
Southern California Orange Special.	Southern California Lawn and Nursery.
Southern California "A" Special.	Southern California Fruit Special.
Southern California "B" Special.	Southern California Fruit Special A.
Southern California Fruit and Vine.	Southern California Fruit Special B.
Southern California Peach and Apricot.	

Sparr Fruit Co., Los Angeles, Cal.

Registration No. 41.

Nitrate of Soda.

Swift & Co., Chicago, Ill.

Registration No. 5.

Swift's Diamond "C" Fertilizer.

Swift's Diamond "D" Fertilizer.

Swift's Diamond "E" Fertilizer.

Swift's Diamond "K" Fertilizer.

Swift's Diamond "L" Fertilizer.

Swift's Diamond "M" Fertilizer.

Swift's Ground Blood.

Swift's Acidulated Bone Meal.

Swift's Special Bone Meal.

Swift's High Grade Tankage.

Special brands to the order of the consumer.

Union Fertilizer Co., Los Angeles, Cal.

Registration No. 9.

Bat Guano.

Bird Guano.

Blood.

Blood and Bone.

Bone Meal.

Fall Fertilizer.

Fruiting Fertilizer.

Guano Phosphate.

Lawn Fertilizer.

Nursery or Spring Fertilizer.

Special Fruiting.

Superphosphate.

Tankage.

Special fertilizers to order of consumers.

Union Superphosphate Co., San Francisco, Cal.

Registration No. 31.

Superphosphate.

Basic Superphosphate No. 1.

Basic Superphosphate No. 2.

Western Meat Co., San Francisco, Cal.

Registration No. 11.

W. M. Co. Dry Ground Tankage.

W. M. Co. Raw Bone Meal.

Special Bone Meal.

The Woodbridge Chemical Works, San Bernardino, Cal.

Registration No. 15.

Bone Meal.

Citrus A.

Citrus B.

Lawn and Rose Fertilizer.

Nitrate of Soda.

Nursery Stock Fertilizer.

No. 1 Orange Fertilizer.

Special Lemon Fertilizer.

Special Summer Fertilizer.

Tankage.

Vegetable Fertilizer.

Woodbridge Fertilizer Co., Los Angeles, Cal.

Registration No. 22.

Blood.

Bone Meal.

Citrus Special.

Nitrate of Soda.

Muriate of Potash.

Riverside Special.

Rose and Lawn.

Sulfate of Potash.

Superphosphate.

SCOPE OF INSPECTION.

The present report contains the tabulated analyses of fertilizers collected for the half-year ending December 31, 1908. During this period 289 samples of fertilizers and fertilizing materials have been received at the laboratory. Of this number 11 were sent by farmers under the two-dollar fee provision, 126 were taken by inspectors from purchasers' goods upon the request of the purchasers, and 134 were taken by inspectors from goods in the hands of agents and manufacturers. On 24 samples the analysis as reported was used as a basis of settlement by mutual agreement of buyer and seller. No guaranty was required or given with goods sold under such an agreement. Eighteen samples of a miscellaneous nature, which do not come within the legal definition of a commercial fertilizer, are omitted from the tables.

The following classification may be made of samples reported in this bulletin:

Complete fertilizers	130
Bone Meal	30
Tankage	57
Superphosphate	16
Dried Blood	13
Nitrate of Soda.....	17
Sulfate of Potash	5
Bat guano	2
Bird guano phosphate	1
Total	271

DEFICIENCIES.

In the analyses of the above samples, the following number of deficiencies greater than allowed by law occur:

Available phosphoric acid (total when available is not guaranteed)....	29
Total nitrogen	34
Potash	10
In valuation	19

These deficiencies were found in 66 samples.

The fertilizer law allows a deficiency of 0.25 per cent in nitrogen, 0.50 per cent in potash, and 1.00 per cent in available phosphoric acid.

FERTILIZER VALUATIONS.

The calculations of the commercial values of the fertilizers here reported are made on the so-called unit basis. Such calculations con-

sist simply in multiplying the number of per cent of each ingredient by the price per unit and adding the products. The sum thus obtained is the commercial value per ton at the prices used. If it is desired to use such a calculation for determining the amount which should be paid for goods, or the rebate to which the buyer is entitled owing to the goods delivered being below the guaranty, it can only be satisfactorily done if a definite price per unit has been agreed upon between buyer and seller. But for the mere purpose of showing the relative values of goods to guaranties, it is not at all necessary that the prices adopted should be the exact market prices. Thus it is that the Fertilizer Control in attempting to show the relation between values found and values claimed, uses a schedule which is admittedly only an approximate average of market values. Owing to market fluctuations, differences in cost of delivery at different points, and other causes, the obtaining of true average market prices is an impossibility. But if the reader will bear in mind the true purpose of the valuations reported, these will have served their turn and he will not be led to assume that the Experiment Station is dictating the prices at which goods shall be sold.

SCHEDULE OF TRADE VALUES.

Phosphoric Acid.

	Cents Per Pound.	Value Per Unit.
Available (water and citrate-soluble).....	6	\$1 20
Insoluble in mixed fertilizers.....	2½	0 50
In fine* bone and tankage.....	4½	0 90
In medium* bone and tankage.....	3½	0 70
In fine* Thomas phosphate powder.....	5	1 00
In medium* Thomas phosphate powder.....	3	0 60

Nitrogen.

In ammonia salts.....	18	3 60
In nitrates	17½	3 50
Organic in—		
Blood	21	4 20
Mixed fertilizers	20	4 00
Fine* bone and tankage.....	20½	4 10
Medium* bone and tankage.....	16	3 20

Potash.

From sulfate	6	1 20
From muriate	5	1 00

*Fine and medium bone are separated by a sieve with 50 meshes to the inch; fine and medium tankage by a 25-mesh sieve; and fine and medium Thomas phosphate powder by a 100-mesh sieve.

REPORT OF ANALYSES.*

Available phosphoric acid is not determined in bone meal, tankage, and Thomas phosphate powder, unless requested. The fineness of these materials is determined, fine and medium bone being separated by a sieve of 50 meshes to the inch; tankage by a 25-mesh sieve; and Thomas phosphate powder by a 100-mesh sieve.

Nitrogen in ammonia salts will, in some cases, be found reported when nitrogen in this form is not guaranteed. In some of such cases this form of nitrogen is produced by conversion of organic nitrogen during process of manufacture, and is not to be considered a deviation from guaranty of materials used. Guanos carry more or less nitrogen in nitrates and ammonia salts, and when any appreciable quantity of guano is used the manufacturer should take into account the fact that some nitrogen will show as nitrates and ammonia salts. The failure to take this into consideration may perhaps account for the appearance of these forms of nitrogen in some samples in which only organic nitrogen was guaranteed.

The percentage of chlorin is given when it exceeds 0.50 per cent. It is a matter of only technical interest whether chlorin present is from muriate of potash, kainit, or from common salt that may be in some of the materials used. If a manufacturer uses sulfate of potash and uses a tankage with it containing a large amount of chlorin, from a practical standpoint he has lowered the grade of his fertilizer just as much as if he had used muriate of potash instead of sulfate of potash. Chlorin from all other sources is as objectionable as from muriate of potash. However, if muriate of potash is found when sulfate is guaranteed, the fact will be published.

The following abbreviations are used in the tables: Bl=blood, Bn=bone, Fs=fish, G=guano, Super=superphosphate, T=tankage.

Guaranties are entered in *italics*. Deficiencies greater than allowed by law are entered in bold type.

* The statement has sometimes been made that the work of the Fertilizer Control is being done by students. Such is not the case. All analyses are made by Messrs. P. L. McCreary and P. L. Hibbard, who are both careful and experienced analysts.

ANALYSES AND VALUATIONS.

Laboratory Number--	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.		FROM WHOM OBTAINED.	Value per Ton at Station Prices-----
	Agricultural Chemical Works, Los Angeles, Cal.			
2003	Bat Guano-----	John Broadfield, San Bernardino--	44.76	
	Guaranteed-----		45.00	
1834	Blood-----	Joseph Rennie, Redlands-----	53.25	
	Guaranteed-----		54.60	
1875*	Bone Flour-----	J. L. Smith, Upland-----	30.88	
	Guaranteed-----		28.24	
1939*	Bone Meal-----	Thomas Chisholm, Pasadena-----	33.03	
	Guaranteed-----		26.50	
1760	Lawn-----	E. A. Moore, Redlands-----	23.39	
	Guaranteed-----		21.25	
1940	Lawn-----	Thos. Chisholm, Pasadena-----	21.71	
	Guaranteed-----		21.50	
1865	Nitrate of Soda-----	Gowen & Willard, Santa Ana-----	54.95	
1873	do-----	R. T. Nelson, Upland-----	55.02	
	Guaranteed-----		52.50	
1716	Special Orange and Lemon-----	Thos. Moffatt, Rialto-----	28.98	
	Guaranteed-----		26.50	
1717	Special Orange and Lemon-----	Thomas Moffatt, Rialto-----	23.27	
	Guaranteed-----		24.50	
1718	Special Orange and Lemon-----	Thomas Moffatt, Rialto-----	24.78	
1868	do-----	Gowen and Willard, Santa Ana-----	25.33	
	Guaranteed-----		23.60	
1832	Special Orange and Lemon-----	Mrs. Lucy Painter, Redlands-----	26.43	
1867	do-----	Gowen & Willard, Santa Ana-----	24.95	
	Guaranteed-----		27.10	
1833	Special Orange and Lemon-----	Mrs. Lucy Painter, Redlands-----	26.69	
	Guaranteed-----		26.60	
1851	Special Orange and Lemon-----	National Orange Co, Riverside-----	26.25	
1912	do-----	F. D. Hudson, Riverside-----	26.03	
1914	do-----	do-----	25.74	
1915	do-----	do-----	26.00	
	Guaranteed-----		26.60	
1913	Special Orange and Lemon-----	F. D. Hudson, Riverside-----	25.03	
	Guaranteed-----		26.20	
1916*	Special Orange and Lemon-----	Corona Lemon Co., Corona-----	39.14	
	Guaranteed-----		36.25	
1917*	Special Orange and Lemon-----	Corona Lemon Co., Corona-----	28.81	
	Guaranteed-----		30.70	
1922	Special Orange and Lemon-----	Wm. Berkenstock, Fullerton-----	25.50	
	Guaranteed-----		26.00	
1932	Special Orange and Lemon-----	L. S. Taylor, San Dimas-----	31.85	
	Guaranteed-----		27.50	
1941	Special Orange and Lemon-----	H. F. Dalrymple, Fullerton-----	26.16	
	Guaranteed-----		28.30	
1982	Special Orange and Lemon-----	H. E. Longhead, Covina-----	31.63	
	Guaranteed-----		29.70	

*1875—50 % fine.

*1939—33% fine—Some Hoof.

*1916—Some Hoof.

*1917—Some Hoof.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED,												Chlorin		
	PHOSPHORIC ACID.				NITROGEN.				POTASH.						
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Murate	From Sulphate	Total			
2003			3.99 3.60		4.01	2.36	4.23 10.15		10.60 10.15			1.78 1.27			
1834							12.68 13.00		12.68 13.00						
1875			29.86 25.00				1.91 2.25		1.91 2.25						
1939			21.56 20.00				4.51 3.00		4.51 3.00						
1760	6.10	4.87	10.97	} Super T }			2.66	Bl, Bn	2.66	2.73					
	5.00	5.00	10.00				2.50		2.50	2.50	2.50				
1940	4.23	5.31	9.54				2.76		2.76			2.45			1.60
	5.00	5.00	10.00				2.50	Bl, Bn	2.50		2.50				
1865					15.70				15.70						
1873					15.72				15.72						
					15.00				15.00						
1716	5.98	4.33	10.31	} Super T }			3.06	} Bat G Bl, Bn }	3.06		5.33				
	5.00	5.00	10.00				3.00		3.00			5.00			
1717	5.25	4.31	9.56		0.96	0.12	1.60		2.68			3.85			
	6.00	2.00	8.00		1.00	2.00	3.00		3.00		4.00				
1718	6.13	4.63	10.76	} Super T }			3.07	} Bat G Bl, Bn }	3.07		2.36				
1868	5.33	5.05	10.38				3.47		3.47			2.10			
	6.00	4.00	10.00				3.00		3.00	Bl, Bn	3.00		2.00		
1832	5.03	4.72	9.75	} Super T }	1.50	0.08	2.38		3.96		2.48				
1867	5.29	3.96	9.25		1.35	0.15	2.16		3.66			2.26			
	6.00	4.00	10.00		1.00		3.00		4.00			2.00			
1833	6.09	3.18	9.27	} Super T }	1.94	0.19	1.89		4.02		2.30				
	6.00	3.00	9.00		1.00		3.00		4.00			2.00			
1851	3.89	4.48	8.37		1.93		2.15		4.08			3.33			
1912	3.84	5.35	9.19	} Super T }	1.94		1.99		3.93		3.33				
1914	3.70	4.59	8.29		2.03		2.00		4.03			3.25			
1915	3.50	5.14	8.64		2.09		1.97		4.06			3.36			
	5.00	3.00	8.00	} Super T }	1.00		3.00		4.00		3.00				
1913	3.55	4.70	8.25		1.29		1.68		2.97			5.99			
	5.00	3.00	8.00		1.00		2.00		3.00	Bat G	3.00		6.00		
1916	7.18	5.80	12.98	} Super T }			5.15	Bl, Bn	5.15		5.43				
	5.00	7.50	12.50				5.00		5.00			5.00			
1917	4.74	5.54	10.28		1.70		2.07		3.77			5.10			
	6.00	4.00	10.00	} Super T }	1.00		3.00		4.00		5.00				
1922	4.07	5.56	9.63		0.64		2.34		2.98			5.20			0.60
	5.00	5.00	10.00		1.00		2.00		3.00			5.00			
1932	11.31	7.27	18.58	} Super T }			2.06		2.06		5.33				
	10.00	7.00	17.00				1.50		1.50			5.00			
1941	5.10	4.17	9.27		1.76	0.11	1.96		3.83			2.96			
	6.00	4.00	10.00	} Super T }	1.00		3.00		4.00		3.00				
1982	9.48	0.89	10.37				4.28		4.28			2.24			
	9.00	1.00	10.00				4.00		4.00			2.00			

ANALYSES AND VALUATIONS—Continued.

Laboratory Number—	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices -----
	Agricultural Chemical Works—Continued.		
1985	Special Orange and Lemon ----- <i>Guaranteed</i> -----	F. D. Hudson, Riverside -----	27.08 28.45
1874	Sulphate of Potash ----- <i>Guaranteed</i> -----	J. L. Smith, Upland -----	62.83 60.00
1831*	Tankage -----	C. L. Clock, Redlands -----	33.74
1951*	do. -----	Fred. H Clock, Redlands -----	33.34
1954*	do. ----- <i>Sold on Station Analyses</i>	C. H. Clock, Redlands -----	33.40
1942*	Tankage ----- <i>Guaranteed</i> -----	H. F. Dalrymple, Fullerton -----	32.66 31.88
1974*	Tankage ----- <i>Guaranteed</i> -----	E. G. Prather, Covina -----	30.29 33.40
1866	Walnut ----- <i>Guaranteed</i> -----	Gowen and Willard, Santa Ana -----	24.80 25.50
	American Agricultural Chemical Co., Los Angeles, Cal.		
1785	Lawn -----	Graham, Cope Com'l Co., Redlands	30.66
1854	do. ----- <i>Guaranteed</i> -----	L. M. Jacobs, Pasadena -----	30.04 28.28
1848	Lemon Tree -----	J. H. McCulloch, Chula Vista -----	29.88
1928	do. -----	T. J. Bryan, Lemon Grove -----	30.54
1929	do. ----- <i>Guaranteed</i> -----	San Diego Fruit Co., Chula Vista -----	30.64 28.28
1930	Lemon Tree ----- <i>Guaranteed</i> -----	San Diego Fruit Co., Chula Vista -----	30.08 28.19
1921	Nitrate of Soda ----- <i>Guaranteed</i> -----	Leffingwell Rancho, Whittier -----	54.74 55.44
1769	Nursery Stock -----	L. V. W. Brown, Riverside -----	30.35
1783	do. -----	Graham, Cope Com'l Co., Redlands	30.55
1816	do. -----	Limoneira Co., Santa Paula -----	28.93
1860	do. -----	Martin Bros., Pomona -----	31.42
1938	do. -----	Whittier Citrus Assn., Whittier -----	30.86
1952	do. -----	N. D. Mussey, Covina -----	30.00
1953	do. ----- <i>Guaranteed</i> -----	H. Smeltser, Covina -----	30.68 28.27
1784	Orange and Lemon -----	Graham, Cope Com'l Co., Redlands	28.61
1819	do. -----	W. W. Blanchard, Santa Paula -----	29.40
1838	do. -----	S. H. Barrett, East Highlands -----	28.54
1883	do. -----	W. S. Jones, Pomona -----	29.75
1931	do. -----	G. W. Thurston, Lemon Grove -----	31.56
1991	do. ----- <i>Guaranteed</i> -----	C. S. Spencer, Orange -----	27.52 27.34
1820	Special Fruit and Vine ----- <i>Guaranteed</i> -----	R. H. Hille, San Fernando -----	34.11 33.91

*1831—85% fine.

*1951—88% fine.

*1954—86% fine.

*1942—82% fine, some hoof.

*1974—88% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number --	POUNDS PER HUNDRED.													Chlorin-----
	PHOSPHORIC ACID.				NITROGEN.					POTASH.				
	Available----	Insoluble----	Total-----	Guaranteed as Derived From-----	In Nitrates--	In Ammonia Salts-----	Organic-----	Organic Nitrogen Guaranteed as Derived From-----	Total-----	From Muriate----	From Sulphate---	Total-----		
1985	3.25	5.59	8.84	Super	2.70	-----	2.03	-----	4.73	-----	2.35	-----	0.57	
-----	4.00	4.00	8.00	T	1.50	-----	3.50	Bl, Bn	5.00	-----	2.00	-----	-----	
1874	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	52.36	-----	1.60	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	50.00	-----	-----	
1831	-----	-----	12.17	Bn	-----	-----	5.84	Bl, Bn	5.84	-----	-----	-----	-----	
1951	-----	-----	12.21		-----	-----	5.67		5.67	-----	-----	-----		
1954	-----	-----	12.16		-----	-----	5.73		5.73	-----	-----	-----		
1942	-----	-----	10.69	-----	-----	-----	6.12	-----	6.12	-----	-----	-----	-----	
-----	-----	-----	13.50	-----	-----	-----	5.35	-----	5.35	-----	-----	-----	-----	
1974	4.54	7.67	12.21	-----	-----	-----	5.25	-----	5.25	-----	-----	-----	-----	
-----	7.50	6.00	13.50	-----	-----	-----	5.35	-----	5.35	-----	-----	-----	-----	
1866	4.18	5.44	9.62	Super	-----	-----	2.99	-----	2.99	-----	4.25	-----	-----	
-----	6.00	3.00	9.00	T	-----	-----	3.00	Bl, Bn	3.00	-----	4.00	-----	-----	
1785	9.46	2.09	11.55	Bn, Acid Phos- phate	2.73	1.05	0.64	Bat G, Bl, Bn, r	4.42	-----	1.98	-----	-----	
1854	9.25	2.00	11.25		2.68	0.90	0.73		4.31	-----	2.00	-----	-----	
-----	9.00	1.00	10.00		1.65	1.00	1.45		4.10	-----	1.50	-----	-----	
1848	8.91	2.59	11.50	Bn, Acid Phos- phate	2.26	0.95	0.97	Bat G, Bl, Bn, r	4.18	-----	2.23	-----	-----	
1928	9.43	1.06	10.49		2.38	0.48	1.60		4.46	-----	1.86	-----	0.60	
1929	9.71	0.94	10.65		2.29	0.48	1.66		4.43	-----	1.78	-----	-----	
-----	9.00	1.00	10.00	Bn, Acid Phos- phate	1.65	1.00	1.45	Bat G, Bl, Bn, Fs, T	4.10	-----	1.50	-----	-----	
1930	9.49	1.53	11.02		2.93	0.80	0.66		4.39	-----	1.80	-----	-----	
-----	9.00	1.00	10.00		2.30	0.04	1.40		4.10	-----	1.50	-----	-----	
1921	-----	-----	-----	-----	15.64	-----	-----	-----	15.64	-----	-----	-----	-----	
-----	-----	-----	-----	-----	15.84	-----	-----	-----	15.84	-----	-----	-----	-----	
1769	9.58	2.11	11.69	Bn, Acid Phos- phate	2.45	0.83	0.94	Bat G, Bl, Bn r	4.22	-----	2.06	-----	-----	
1783	9.53	1.86	11.39		2.48	0.84	0.98		4.30	-----	2.14	-----	-----	
1816	8.93	1.88	10.81		2.44	1.02	0.69		4.15	-----	1.92	-----	-----	
1860	9.58	1.84	11.42	Bn, Acid Phos- phate	2.51	1.00	0.93	Bat G, Bl, Bn r	4.44	-----	2.42	-----	-----	
1938	9.43	1.95	11.38		2.35	0.80	1.20		4.35	-----	2.22	-----	-----	
1952	9.31	1.70	11.01		3.04	0.46	0.90		4.40	-----	1.74	-----	-----	
1953	9.63	1.28	10.91	Bn, Acid Phos- phate	2.74	0.68	1.06	Bat G, Bl, Bn r	4.48	-----	1.84	-----	-----	
-----	9.00	1.00	10.00		1.65	1.00	1.45		4.10	-----	1.50	-----	-----	
1784	8.38	1.89	10.27		2.14	0.94	0.66		3.74	-----	3.41	-----	-----	
1819	8.47	1.38	9.85	Bn, Acid Phos- phate	2.83	0.52	0.64	Bat G, Bl, Bn r	3.99	-----	3.51	-----	0.62	
1838	8.06	2.03	10.09		2.10	0.95	0.65		3.70	-----	3.73	-----	0.62	
1883	9.29	1.62	10.91		2.08	1.00	0.69		3.77	-----	3.46	-----	-----	
1931	8.89	2.03	10.92	Bn, Acid Phos- phate	2.80	0.93	0.63	Bat G, Bl, Bn r	4.36	-----	3.50	-----	0.56	
1991	7.69	2.02	9.71		1.97	0.98	0.75		3.70	-----	3.47	-----	0.70	
-----	8.00	1.00	9.00		2.00	0.40	1.30		3.70	-----	3.00	-----	-----	
1820	7.47	0.66	8.13	Bn, Acid Phos- phate	2.62	0.30	0.68	Bat G, Bl, Bn r	3.60	-----	9.87	-----	0.55	
-----	7.00	1.00	8.00		1.35	0.80	1.35		3.50	-----	10.00	-----	-----	
-----	-----	-----	-----		-----	-----	-----		-----	-----	-----	-----	-----	

ANALYSES AND VALUATIONS—Continued.

Laboratory Number--	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices.-----
	Armour Fertilizer Works, Los Angeles, Cal.		
1731	Blood-----	I. W. Freeman, Redlands-----	57.65
1732	do-----	I. W. Freeman, Redlands-----	58.71
1976	do-----	J. N. Baylis, San Bernardino-----	57.32
	<i>Guaranteed</i> -----		57.40
1749	Bone, Blood and Potash-----	I. W. Freeman, Redlands-----	35.34
1859	do-----	C. E. Sumner, Los Angeles-----	35.57
	<i>Guaranteed</i> -----		34.10
1751	Bone, Blood and Potash-----	I. W. Freeman, Redlands-----	36.28
	<i>Guaranteed</i> -----		34.40
1723*	Bone Meal-----	W. T. Henderson, Riverside-----	30.28
1793*	do-----	J. W. Cruickshank, Arlington-----	26.91
1849*	do-----	Mohnicke & Sons, Chula Vista-----	29.62
	<i>Guaranteed</i> -----		27.10
1738*	Bone Meal-----	J. W. Cruickshank, Arlington-----	24.87
	<i>Guaranteed</i> -----		27.30
1754*	Bone Meal-----	I. W. Freeman, Redlands-----	30.58
1877*	do-----	Arlington H'ts Fruit Co., Riv'side-----	27.45
1977*	do-----	Arlington H'ts Fruit Co., Riv'side-----	28.12
	<i>Guaranteed</i> -----		27.15
1876*	Bone Meal-----	Arlington H'ts Fruit Co., Riv'side-----	27.87
1879*	do-----	do-----	28.08
1885*	do-----	Placentia Fruit Co., Placentia-----	28.38
	<i>Guaranteed</i> -----		27.20
1878*	Bone Meal-----	Arlington H'ts Fruit Co., Riv'side-----	27.93
	<i>Guaranteed</i> -----		25.50
1970*	Bone Meal-----	Arlington H'ts Fruit Co., Riv'side-----	26.03
	<i>Guaranteed</i> -----		27.25
1780	Fruit and Vine-----	Factory, Colton-----	25.97
	<i>Guaranteed</i> -----		27.70
1856	Fruit and Vine-----	Mohnicke & Sons, Chula Vista-----	32.47
	<i>Guaranteed</i> -----		27.80
1778	Lawn and Garden-----	Factory, Colton-----	28.41
	<i>Guaranteed</i> -----		25.35
1721	Nitrate of Soda-----	J. C. Boyd, Rialto-----	53.37
1755	do-----	I. W. Freeman, Redlands-----	54.14
	<i>Guaranteed</i> -----		52.50
1719	Orange Tree Manure-----	J. C. Boyd, Rialto-----	28.52
1730	do-----	I. W. Freeman, Redlands-----	30.43
	<i>Guaranteed</i> -----		27.40
1725	Orange Tree Manure-----	W. T. Henderson, Riverside-----	26.79
1850	do-----	Mohnicke & Sons, Chula Vista-----	26.94
	<i>Guaranteed</i> -----		26.72
1869	Orange Tree Manure-----	Santiago O'ge Grow's Assn., Orange-----	29.79
	<i>Guaranteed</i> -----		26.80
1720	Special-----	J. C. Boyd, Rialto-----	47.59
	<i>Guaranteed</i> -----		45.40

*1723—68% fine.

*1754—68% fine.

*1879—70% fine.

*1793—67% fine.

*1877—68% fine.

*1885—70% fine.

*1849—66% fine.

*1977—69% fine.

*1878—67% fine.

*1738—72% fine.

*1876—71% fine.

*1970—73% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number--	POUNDS PER HUNDRED.												Chlorin-----
	PHOSPHORIC ACID.				NITROGEN.				POTASH.				
	Available---	Insoluble---	Total-----	Guaranteed as Derived From	In Nitrates--	In Ammonia Salts-----	Organic-----	Organic Nitrogen Guaranteed as Derived From	Total-----	From Muriate-----	From Sulphate---	Total-----	
1731							14.06		14.06				
1732							14.32		14.32				
1976							13.98		13.98				
							14.00		14.00				
1749	7.01	3.30	10.31	Bn, G	1.75	0.62	1.97	Bl, Bn G, T	4.34		7.45		
1859	8.28	2.63	10.91		1.43	0.54	1.98		3.95		7.88		
	8.00	2.00	10.00		1.00	1.00	2.00		4.00		7.00		
1751	8.01	3.01	11.02	Super		1.55	2.72		4.27		7.67		
	8.00	2.00	10.00			1.50	2.50		4.00		7.00		
1723			23.33				3.04		3.04				
1793			21.86				2.48		2.48				
1849			24.30				2.68		2.68				
			22.00				2.50		2.50				
1738			20.80				2.12		2.12				
			22.00				2.50		2.50				
1754			22.66				3.26		3.26				
1877			22.28				2.52		2.52				
1977			22.26				2.70		2.70				
			22.00				2.50		2.50				
1876			22.40				2.59		2.59				
1879			22.38				2.65		2.65				
1885			24.68				2.25		2.25				
			22.00				2.50		2.50				
1878			21.58				2.81		2.81				
			20.00				2.50		2.50				
1970			22.94				1.99		1.99				
			22.00				2.50		2.50				
1780	6.18	2.76	8.94	Bn,	1.12		0.90	Bl, Bn	2.02		8.05		0.64
	6.00	2.00	8.00	Super	1.00		1.00	T,	2.00		10.00		
1856	7.31	1.33	8.64	Bn, G	0.23	1.22	0.97	Bl, Bn, G	2.42		11.62		0.80
	6.00	2.00	8.00	Super		1.00	1.00	T	2.00		10.00		
1778	5.26	1.80	7.06	Bn,	1.71		2.18		3.89		5.41		
	4.00	1.00	5.00	Super	1.50		2.50	Bl, Bn, T	4.00		4.00		
1721					15.25				15.25				
1755					15.47				15.47				
					15.00				15.00				
1719	7.63	3.55	11.18	Bn			2.88	Bl, Bn	2.88		5.06		
1730	7.15	3.32	10.47				3.46		3.46		5.29		
	8.00	2.00	10.00				3.00		3.00		4.00		
1725	7.06	3.02	10.08	G	1.34	0.45	1.28	Bl, Bn	3.07		4.48		
1850	7.04	3.22	10.26	Super	1.14	0.52	1.30	G, T	2.96		4.85		
	8.00	2.00	10.00		0.75	0.75	1.50		3.00		4.00		
1869	7.48	3.53	11.01			1.71	1.80		3.51		4.75		0.60
	8.00	2.00	10.00			1.50	1.50		3.00		4.00		
1720			20.28			1.83	5.88		7.71		1.05		
			17.00	Bn, G		2.00	6.00	Bn, G	8.00		0.50		

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices.
	Armour Fertilizer Works, Los Angeles—Continued.		
1779	Special	Factory, Colton	33.44
1814	do	R. H. Shoemaker, Los Angeles	32.90
	Guaranteed		30.10
1733	Special 5-8-2	I. W. Freeman, Redlands	27.31
1857	do	Mohnicke & Sons, Chula Vista	33.00
	Guaranteed		28.10
1855	Special 5-8-2	Mohnicke & Sons, Chula Vista	32.71
1992	do	W. H. Fleet, Piru	31.08
	Guaranteed		28.40
1756	Sulphate of Potash	I. W. Freeman, Redlands	60.48
1979	do	Dr. J. N. Baylis, San Bernardino	58.89
	Guaranteed		57.60
1724*	Tankage	W. T. Hendersoh, Riverside	26.10
	Guaranteed		29.60
1734*	Tankage	I. W. Freeman, Redlands	25.89
	Guaranteed		30.10
1752*	Tankage	Arlington H'ts Fruit Co., Riv'side	33.34
1753*	do	do	33.53
1770*	do	do	27.48
1771*	do	do	33.79
1772*	do	do	28.02
1773*	do	do	27.67
1774*	do	do	28.63
1775*	do	do	28.94
1776*	do	do	28.44
1777*	do	do	27.87
1781*	do	do	28.00
1782*	do	do	28.57
1805*	do	do	27.63
1806*	do	do	29.41
1807*	do	do	27.79
1835*	do	do	34.08
1836*	do	do	34.03
1837*	do	do	33.21
1845*	do	do	33.03
1846*	do	do	33.00
1862*	do	do	33.64
	<i>Sold on Station Analyses</i>		
1817*	Tankage	John Martin, Colton	50.03
	Guaranteed		46.10
1978*	Tankage	Dr. J. N. Baylis, San Bernardino	30.99
	Guaranteed		29.00

*1724—72% fine.

*1734—79% fine.

*1752—85% fine.

*1753—84% fine.

*1770—57% fine.

*1771—80% fine.

*1772—58% fine.

*1773—57% fine.

*1774—60% fine.

*1775—57% fine.

*1776—59% fine.

*1777—58% fine.

*1781—54% fine.

*1782—55% fine.

*1805—65% fine.

*1806—58% fine.

*1807—57% fine.

*1835—90% fine.

*1836—89% fine.

*1837—89% fine.

*1845—90% fine.

*1846—86% fine.

*1862—84% fine.

*1817—71% fine.

Technically known as stick.

*1978—58% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	POUNDS PER HUNDRED.												Chlorin -----	
	PHOSPHORIC ACID.				NITROGEN.					POTASH.				
	Available---	Insoluble---	Total-----	Guaranteed as Derived From-----	In Nitrates--	In Ammonia Salts-----	Organic-----	Organic Nitrogen Guaranteed as Derived From-----	Total-----	From Murate-----	From Sulphate---	Total-----		
1779	7.93	2.18	10.11		1.41		0.97		2.38		11.69		0.62	
1814	8.47	2.40	10.87	Bn,	1.16		0.98		2.14		11.30			
	8.00	2.00	10.00	Super	1.00		1.00	Bl, Bn, T	2.00		10.00			
1733	7.35	3.10	10.45		1.60	0.40	1.90	Bl, Bn G, T	3.90		1.92			
1857	7.93	1.33	9.26		2.12	1.80	1.50			5.42		2.43		
	8.00	2.00	10.00	Bn	1.00	1.00	2.00			4.00		2.00		
1855	7.85	3.19	11.04	G	0.30	2.10	2.40		4.80		2.91			
1992	8.09	3.33	11.42	Super	0.14	1.88	2.30		4.32		2.70			
	8.00	2.00	10.00			1.50	2.50		4.00		2.00			
1756											50.40		0.95	
1979											49.08		1.04	
											48.00			
1724			9.50				4.82		4.82					
			13.00	Bn			5.00	Bl, Bn	5.00					
1734			8.42				4.86		4.86					
			13.00	Bn			5.00	Bl, Bn	5.00					
1752			11.23				5.98		5.98					
1753			11.91				5.88		5.88					
1770			12.61				4.66		4.66					
1771			11.55				6.02		6.02					
1772			12.67				4.75		4.75					
1773			12.47				4.89		4.89					
1774			12.66				4.88		4.88					
1775			12.93				4.96		4.96					
1776			13.02				4.77		4.77					
1777			13.08				4.62		4.62					
1781			12.93				4.76		4.76					
1782			13.27				4.70		4.70					
1805			14.87				4.04		4.04					
1806			14.62				4.69		4.69					
1807			13.30				4.57		4.57					
1835			16.62				4.85		4.85					
1836			13.06				5.65		5.65					
1837			14.18				4.97		4.97					
1845			15.20				4.83		4.83					
1846			14.52				5.12		5.12					
1862			14.25				5.38		5.38					
1817							13.03		13.03					
							12.00		12.00					
1978			15.84				4.92		4.92					
			13.00				5.00		5.00					

ANALYSES AND VALUATIONS—Continued.

Laboratory Number—	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices—
	Balfour, Guthrie & Co., San Francisco.		
1852	Nitrate of Soda.....	Arlington H'ts Fruit Co., Riv'side	54.32
1975	do.....	do.....	54.46
1980	do.....	do.....	54.04
	<i>Guaranteed</i>		54.84
1844	Nitrate of Soda.....	J. E. Adamson, Pomona.....	54.53
	<i>Guaranteed</i>		52.50
	California Fertilizer Works, San Francisco.		
1798	Blood.....	G. A. Hansen, Upland.....	49.05
	<i>Guaranteed</i>		48.42
1799*	Bone and Blood.....	G. A. Hansen, Upland.....	32.84
	<i>Guaranteed</i>		32.84
1800	Bone and Potash.....	G. A. Hansen, Upland.....	33.63
	<i>Guaranteed</i>		34.40
1797*	Bone Meal.....	G. A. Hansen, Upland.....	25.49
	<i>Guaranteed</i>		25.35
1790	Fruit, Orange and Vine.....	M. F. Tarpey, Tarpey.....	26.66
	<i>Guaranteed</i>		27.10
1821	Nitrate of Soda.....	G. A. Hansen, Upland.....	55.44
	<i>Guaranteed</i>		54.60
1948	Special.....	A. W. Handyside, Duarte.....	27.26
	<i>Guaranteed</i>		26.58
1949	Special.....	A. W. Handyside, Duarte.....	29.77
	<i>Guaranteed</i>		27.88
1950	Special.....	A. W. Handyside, Duarte.....	29.27
	<i>Guaranteed</i>		28.91
1955	Special.....	Arthur Handyside, Duarte.....	29.51
	<i>Guaranteed</i>		28.00
1796	Special Nursery Stock.....	G. A. Hansen, Upland.....	25.18
	<i>Guaranteed</i>		27.80
1822	Special Orange and Lemon.....	G. A. Hansen, Upland.....	26.19
	<i>Guaranteed</i>		27.53
1794	Special Orange Tree.....	G. A. Hansen, Upland.....	29.08
	<i>Guaranteed</i>		27.45
1795	Special Orange Tree.....	G. A. Hansen, Upland.....	26.74
	<i>Guaranteed</i>		27.45
1823	Sulphate of Potash.....	G. A. Hansen, Upland.....	63.50
	<i>Guaranteed</i>		57.60
	F. B. Carlisle Co., Port Angeles, Wash.		
1825	Wilgrow.....	Chas. Weinsel, Los Angeles.....	44.28
1858	do.....	L. M. Jacobs, Pasadena.....	42.12
1943	do.....	Doyle, Barnes Co., San Diego.....	39.66
1994	do.....	Lohman Bros., Oxnard.....	39.23
	<i>Guaranteed</i>		44.70
1993*	Wilgrow.....	H. K. Small & Sons, Riverside.....	29.77
	<i>Guaranteed</i>		23.05

*1799—55% fine.

*1797—60% fine.

*1993—Total contents single 25c pkg.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED.												Chlorin
	PHOSPHORIC ACID.				NITROGEN.				POTASH.				
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Muriate	From Sulphate	Total	
1852					15.52				15.52				
1975					15.56				15.56				
1980					15.44				15.44				
					15.67				15.67				
1844					15.58				15.58				
					15.00				15.00				
1798							11.68		11.68				
							11.53		11.53				
1799			24.50				3.58		3.58				
			22.00	Bn			4.12	Bl, Bn	4.12				
1800			17.60				2.61		2.61	7.59		0.54	
			20.00	Bn			2.50	Bl, Bn	2.50	7.00			
1797			21.72				2.17		2.17				
			20.00				2.50		2.50				
1790	5.26	3.64	8.90	Bn, T	0.65	0.78	1.19		2.62	7.23			
	6.00	3.50	9.50	Super	0.50		2.00	Bl, Bn, T	2.50	7.00			
1821					15.84				15.84				
					15.60				15.60				
1948			11.15				2.62		2.62	6.55		0.60	
			10.00	Bn			2.50	Bl, Bn	2.50	7.15			
1949	5.56	6.60	12.16	Bn,			3.00		3.00	6.50		0.67	
	6.00	3.75	9.75	Super			2.60	Bl, Bn	2.60	7.00			
1950	8.30	1.56	9.86		2.97				2.97	6.79		1.07	
	9.00	1.00	10.00		2.70				2.70	6.80			
1955	4.04	2.42	6.46				2.72		2.72	10.48		1.00	
	5.00						2.50		2.50	10.00			
1796	6.58	3.22	9.80		1.29	0.48	1.48		3.25	2.93			
	7.00	3.00	10.00		1.00		3.00		4.00	2.00			
1822	5.33	4.80	10.13	Bn,	0.77	0.75	1.48		3.00	5.06		0.85	
	7.00	2.50	9.50	Super	0.25		2.75	Bl, Bn	3.00	5.00			
1794	7.26	3.05	10.31		0.76	0.50	1.32		2.58	7.57		0.74	
	6.50	2.50	9.00		0.25		2.25		2.50	7.10			
1795	5.36	1.91	7.27		0.25	0.65	0.52		1.42	11.71		0.96	
	5.00	2.50	7.50			0.50	1.00		1.50	12.00			
1823										52.92		2.35	
										48.00			
1825	8.39	4.52	12.91				6.14		6.14	6.16		1.42	
1858	4.96	8.22	13.18				5.98		5.98	6.78		1.40	
1943	3.63	9.19	12.82				6.07		6.07	5.36		0.90	
1994	2.98	9.19	12.17	Bn,			5.93	Bn,	5.93	6.11		1.75	
	5.00	7.00	12.00	Whl G			7.00	Whale G	7.00	6.00			
1993	2.94	3.57	6.51	Bn,			3.93	Bn,	3.93	7.28		1.28	
	2.50	2.50	5.00	Whl G			3.50	Whale G	3.50	4.00			

ANALYSES AND VALUATIONS—Continued.

Laboratory Number—	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Sta-
			tion Prices -----
	Cudahy Packing Co., Omaha, Neb.		
1761*	Blood and Bone-----	Carrol B. Smith, Redlands-----	34.67
	<i>Guaranteed</i> -----	-----	32.97
	Morris & Co., Kansas City.		
1986	Pacific Big 1-----	H. Duffill, Los Angeles-----	27.02
	<i>Guaranteed</i> -----	-----	28.00
1792*	Pacific Big 2-----	The Leffingwell Rancho, Whittier-----	33.76
1880*	do-----	C. C. Chapman, Fullerton-----	33.82
	<i>Guaranteed</i> -----	-----	32.00
1881*	Pacific Big 2-----	C. C. Chapman, Fullerton-----	33.83
	<i>Guaranteed</i> -----	-----	32.10
1886*	Pacific Big 2-----	A. S. Bradford, Fullerton-----	33.06
1958*	do-----	C. E. Daniels, Covina-----	31.68
1987*	do-----	L. J. Fay, Rivera-----	28.07
	<i>Guaranteed</i> -----	-----	31.60
1971*	Pacific Big 2-----	W. B. Hervey, Santa Ana-----	30.04
1973*	do-----	W. J. Kincaid, Cucamonga-----	30.31
	<i>Guaranteed</i> -----	-----	31.50
1995*	Pacific Big 2-----	S'ra Madre Cit's As., Lamanda P.-----	30.11
	<i>Guaranteed</i> -----	-----	31.80
1887*	Pacific Big 4-----	C. C. Chapman, Fullerton-----	44.95
	<i>Guaranteed</i> -----	-----	44.00
1944*	Pacific Big 4-----	Bollinger & Crane, Riverside-----	43.34
	<i>Guaranteed</i> -----	-----	43.60
1988*	Pacific Big 4-----	H. Duffill, Fullerton-----	44.02
	<i>Guaranteed</i> -----	-----	43.21
1722*	Pacific Big 7-----	Colton Hdw. Co., Colton-----	39.34
	<i>Guaranteed</i> -----	-----	39.23
1791*	Pacific Big 7-----	do-----	37.05
	<i>Guaranteed</i> -----	-----	37.75
1989*	Pacific Big 7-----	H. Duffill, Fullerton-----	42.37
	<i>Guaranteed</i> -----	-----	39.07
1888*	Pacific Big 8-----	J. Q. Adams, Pomona-----	36.61
1923*	do-----	San Gabriel Valley Mill. Co., Cov.-----	37.80
1956*	do-----	F. P. Morrison, Redlands-----	35.16
1957*	do-----	W. A. Hart, Highgrove-----	37.40
1990	do-----	L. J. Fay, Pico-----	30.02
1996*	do-----	Sierra Madre Cit's As., Lamanda P.-----	33.46
	<i>Guaranteed</i> -----	-----	34.80

*1761—80% fine.
 *1792—71% fine, contains hoof.
 *1880—72% fine, some hoof.
 *1881—76% fine, some hoof.
 *1886—54% fine, considerable hoof.
 *1958—54% fine, some hoof.
 *1987—54% fine.
 *1971—49% fine.
 *1973—48% fine.
 *1995—63% fine.
 *1887—89% fine.

*1944—85% fine, some hoof.
 *1988—81% fine.
 *1722—87% fine.
 *1791—67% fine, some hoof.
 *1989—85% fine.
 *1888—some hoof.
 *1923—considerable hoof.
 *1956—considerable hoof.
 *1957—considerable hoof.
 *1996—considerable hoof.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number ..	POUNDS PER HUNDRED,										
	PHOSPHORIC ACID.				NITROGEN.				POTASH.		
	Available---	Insoluble---	Total-----	Guaranteed as Derived From-----	In Nitrates--	In Ammonia Salts-----	Organic-----	Organic Nitrogen Guaranteed as Derived From-----	Total-----	From Murate----	From Sulphate---
											Total-----
1761	6.57	4.58	11.15				6.25		6.25		
	7.50	6.00	13.50	Bn			5.35	Bl, Bn	5.35		
1986			20.26				1.32		1.32		4.61
			25.00	Bn			0.80	Bn	0.80		4.00
1792			28.38				2.88		2.88		
1880			27.06				3.17		3.17		
			28.00	Bn			2.50	Bn	2.50		
1881			27.02				3.15		3.15		
			28.00	Bn			2.50	Bn	2.50		
1886			27.66				2.97		2.97		
1958			30.04				2.08		2.08		
1987			24.60				2.28		2.28		
			28.00	Bn			2.50	Bn	2.50		
1971			27.40				2.23		2.23		
1973			27.92				2.19		2.19		
			28.00	Bn			2.50	Bn	2.50		
1995			27.30				2.20		2.20		
			28.00	Bn			2.50	Bn	2.50		
1887			5.09				10.22		10.22		
			5.50	T			9.90	T	9.90		
1944			4.52				10.03		10.03		
			5.50	T			9.90	T	9.90		
1988			5.29				10.15		10.15		
			5.50	T			9.90	T	9.90		
1722			9.17				8.04		8.04		
			8.00	T			8.25	T	8.25		
1791			13.49				6.91		6.91		
			8.00	T			8.25	T	8.25		
1989			7.03				9.28		9.28		
			8.00	T			8.25	T	8.25		
1888			26.18				2.58		2.58		4.46
1923			26.90				2.90		2.90		3.90
1956			25.53				2.41		2.41		4.25
1957			25.34	Bn			2.91	Bn	2.91		4.58
1990			22.46				1.92		1.92		3.65
1996			24.70				2.25		2.25		3.92
			25.00				2.50		2.50		4.00

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices -----
	Mountain Copper Co., San Francisco.		
1998	Mixed 4-10-4.....	D. W. Hargett, Glendale.....	34.19
	Guaranteed.....		31.71
1843	Sulphate of Potash.....	J. E. Adamson, Pomona.....	62.11
	Guaranteed.....		59.50
1839	Superphosphate.....	do.....	23.08
1968	do.....	San Fernando Miss. Land Co.....	23.24
1997	do.....	Sparr Fruit Co., Los Angeles.....	23.46
	Guaranteed.....		22.67
1840	Superphosphate.....	J. E. Adamson, Pomona.....	23.40
	Guaranteed.....		22.11
1841	Superphosphate.....	W. B. Bradley, Pomona.....	20.94
	Guaranteed.....		20.43
1842	Superphosphate.....	J. G. Robertson, Pomona.....	23.50
	Guaranteed.....		22.11
2004	Superphosphate.....	Geo. E. Spence, Monrovia.....	22.01
	Guaranteed.....		21.85
1897	Superphosphate 0-17-0.....	The Grange Co., Modesto.....	23.03
	Guaranteed.....		20.40
1898	Superphosphate 0-5-0.....	do.....	6.12
	Guaranteed.....		6.00
	Pacific Guano and Fertilizer Co., San Francisco.		
1741	Blood.....	H. C. Rumohr, Redlands.....	55.69
	Guaranteed.....		50.40
1742	Blood.....	do.....	54.52
	Guaranteed.....		55.44
1743*	Bone Meal.....	do.....	34.26
	Guaranteed.....		30.37
1744*	Bone Meal.....	do.....	33.60
	Guaranteed.....		31.87
1933*	Bone Meal.....	O. E. Gaertner, Redlands.....	34.30
	Guaranteed.....		31.30
1905	Diamond "GG".....	Wm. Winter, Modesto.....	25.15
	Guaranteed.....		24.90
1904*	Fruit and Vine.....	do.....	32.33
1746*	do.....	H. C. Rumohr, Redlands.....	29.89
	Guaranteed.....		29.00
1903	Lawn Dressing.....	Wm. Winter, Modesto.....	33.97
	Guaranteed.....		30.50
1739	Nitrate of Soda.....	H. C. Rumohr, Redlands.....	54.04
	Guaranteed.....		52.50
1740	Nitrate of Soda.....	do.....	54.25
	Guaranteed.....		49.00
1745*	Nursery Stock.....	do.....	34.53
1748*	do.....	do.....	29.96
	Guaranteed.....		27.50
1747	P. N. K.....	do.....	28.97
1906	do.....	Wm. Winter, Modesto.....	28.58
1934	do.....	C. E. Tibbot, Rialto.....	27.97
	Guaranteed.....		27.10

*1743—36% fine.

*1904—Shrimp shells.

*1748—Shrimp shells.

*1744—52% fine.

*1746—Shrimp shells.

*1933—58% fine.

*1745—Shrimp shells.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	POUNDS PER HUNDRED.											
	PHOSPHORIC ACID.				NITROGEN.					POTASH.		
	Available.	Insoluble.	Total.	Guaranteed as Derived From.	In Nitrates.	In Ammonia Salts.	Organic.	Organic Nitrogen Guaranteed as Derived From.	Total.	From Muriate.	From Sulphate.	Total.
1998	10.51	0.34	10.85		3.78	0.42	0.42		4.62		4.15	
	10.00	0.50	10.50	Super	2.67		1.33	Bat G, T	4.00		4.00	
1843											51.76	1.00
											49.60	
1839	19.24	0.32	19.56									
1968	19.37	0.27	19.64									
1997	19.55	0.27	19.82									
	18.89	0.44	19.33									
1840	19.50	0.32	19.82									
	18.43	0.33	18.76									
1841	17.45	0.29	17.74									
	17.03	0.85	17.88									
1842	19.58	0.28	19.86									
	18.43	0.33	18.76									
2004	18.34	0.28	18.62									
	18.21	0.33	18.54									
1897	19.19	0.31	19.50									
	17.00	1.00	18.00									
1898	6.10	0.38	6.48									
	5.00											
1741							13.26		13.26			
							12.00		12.00			
1742							12.98		12.98			
							13.20		13.20			
1743			24.79				4.10		4.10			
			23.00				3.40		3.40			
1744			22.56				4.25		4.25			
			22.00				3.90		3.90			
1933			22.22				4.44		4.44			
			21.00				3.90		3.90			
1905	13.65	2.07	15.72				0.79		0.79		3.81	0.92
	13.00	1.00	14.00	Super			1.00	Bn, G	1.00		4.00	
1904	8.80	4.66	13.46		0.88	0.07	2.15		3.10		6.26	1.45
1746	7.12	4.31	11.43	Bn,	0.79	0.08	1.81	Bl, Bn	2.68		7.41	1.02
	8.00	2.50	10.50	Super	0.50		2.00	Fs, T	2.50		7.00	
1903	10.14	0.48	10.62			4.13		Sulphate	4.13		5.59	
	8.00	1.00	9.00	Super		4.00		Ammonia	4.00		5.00	
1739					15.44				15.44			
					15.00				15.00			
1740					15.50				15.50			
					14.00				14.00			
1745	11.04	3.42	14.46		1.53		2.75		4.28		2.68	1.76
1748	7.64	4.35	11.99	Bn,	1.11	0.22	2.57	Bl, Bn,	3.90		3.05	1.89
	8.00			Super	1.00		3.00	Fs	4.00		2.00	
1747	8.90	3.52	12.42				2.03		2.03		7.01	1.80
1906	9.23	3.05	12.28				1.90	Bl, Bn	1.90		6.98	1.60
1934	8.66	3.73	12.39	Bn, G			2.02	G	2.02		6.36	1.82
	9.50	1.00	10.50	Super			2.00	Fs, T	2.00		6.00	

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices.
	Carroll B. Smith, Redlands, Cal.		
1786*	Bone Meal.....	Factory, Redlands.....	30.09
	Guaranteed.....	.....	26.72
1762*	Tankage.....	do.....	32.38
	Guaranteed.....	.....	31.30
1863*	Tankage.....	Thos. Henslee, Highland.....	36.71
	Guaranteed.....	.....	37.39
1884*	Tankage.....	D. J. Carpenter, Del Rosa.....	37.02
	Guaranteed.....	.....	37.12
1935*	Tankage.....	Hinckley Orange Grove Co., Red.	36.72
	Guaranteed.....	.....	36.73
	Swift & Co., South St. Joseph, Mo.		
1889	Blood.....	G. W. Duley, Upland.....	57.79
1918	Blood.....	Stanton Bros. & Keeling, Covina	60.06
	Guaranteed.....	.....	54.60
1919	Diamond "D".....	H. L. Hostetler, Covina.....	35.43
	Guaranteed.....	.....	33.76
1763*	Diamond "E".....	Carrol B. Smith, Redlands.....	34.41
	Guaranteed.....	.....	33.48
1890*	Diamond "E".....	P. W. Tonneson, Upland.....	34.20
	Guaranteed.....	.....	34.50
1924*	Diamond "E".....	Stanton Bros. & Keeling, Covina	31.19
	Guaranteed.....	.....	34.66
1764	Diamond "G".....	Carrol B. Smith, Redlands.....	34.90
	Guaranteed.....	.....	34.20
1826*	Special Bone Meal.....	Bartlett & Duley, Upland.....	31.18
	Guaranteed.....	.....	26.22
	Union Fertilizer Co., Los Angeles.		
1891	Bat Guano.....	Thos. Strain Jr., Fullerton.....	33.10
	Guaranteed.....	.....	35.40
1728	Blood.....	J. F. Jackson, Riverside.....	49.41
1808	do.....	I. W. Freeman, Upland.....	50.08
1959	do.....	Chas. H. Low, Pachappa.....	52.80
	Guaranteed.....	.....	50.40
1945	Blood.....	Geo. R. Tyler, Pomona.....	56.95
	Guaranteed.....	.....	54.60
1809*	Bone Meal.....	I. W. Freeman, Upland.....	29.85
	Guaranteed.....	.....	27.29
1882	Bone and Potash.....	J. S. Green, Highland.....	34.66
	Guaranteed.....	.....	33.33
1925*	Bone and Tankage.....	Wm. Berkenstock, Fullerton.....	31.97
	Guaranteed.....	.....	29.12
1892	Fall.....	Placentia Fruit Co., Placentia...	28.57
1946	do.....	Geo. R. Tyler, Pomona.....	28.77
1960	do.....	J. G. Ambrose, Covina.....	29.76
1965	do.....	D. B. Bailey, Rialto.....	32.40
	Guaranteed.....	.....	29.20

*1786—63% fine.	*1884—92% fine.	*1890—81% fine.	*1809—44% fine.
*1762—70% fine.	*1935—84% fine.	*1924—82% fine.	*1925—54% fine.
*1863—90% fine.	*1763—56% fine.	*1826—53% fine.	

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED,											
	PHOSPHORIC ACID.				NITROGEN.					POTASH.		
	Available	Insoluble	Total	Guaranteed as Derived From	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived From	Total	From Murate	From Sulphate	Total
1786			34.22				0.72		0.72			
			29.50				0.82		0.82			
1762			10.68				6.55		6.55			
			9.10				6.60		6.60			
1863			14.24				6.33		6.33			
			13.74				6.60		6.60			
1884			14.67				6.29		6.29			
			13.74				6.50		6.50			
1935			13.73				6.50		6.50			
			13.74				6.50		6.50			
1889							13.76		13.76			
1918							14.30		14.30			
							13.00		13.00			
1919			20.94				1.82	Bl, Bn, T	1.82	11.40		
			19.00	Bn			1.64	T	1.64	10.00		
1763			19.24				5.14	Bl, Bn, T	5.14			
			19.00	Bn			4.94	T	4.94			
1890			16.40				5.38	Bl, Bn, T	5.38			
			19.00	Bn			4.94	T	4.94			
1924			19.04				4.05	Bl, Bn, T	4.05			
			19.00	Bn			4.94	T	4.94			
1764			21.51				3.12	Bl, Bn, T	3.12		4.34	
			19.00	Bn			3.25	T	3.25		5.00	
1826			31.80				1.56		1.56			
			29.00				0.82		0.82			
1891	4.54	1.14	5.68	Bat	0.79	0.87	4.56		6.22		2.45	
	5.50			G			6.75	Bat G	6.75		1.50	
1728							12.05		12.05			
1808							12.01		12.01			
1959							12.88		12.88			
							12.00		12.00			
1945							13.56		13.56			
							13.00		13.00			
1809			25.34				2.66		2.66			
			23.00	Bn			2.47	Bn	2.47			
1882			22.82				2.92		2.92		3.68	
			23.00				2.47		2.47		4.00	
1925			20.28				4.28		4.28			
			18.00	Bn			4.00	Bn, T	4.00			
1892			25.78				1.03		1.03		3.19	
1946			23.12		0.02	0.18	0.99		1.19		4.66	
1960			25.54	Bn	0.54	0.28	0.50	Bn	1.32		3.69	0.70
1965	9.99	17.29	27.28	G	0.64	0.23	0.53	G	1.40		4.49	0.67
			24.00	J			1.00	J	1.00		5.00	

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
Union Fertilizer Co., Los Angeles—Continued.			
1726	Fruiting	N. L. May, Rialto	26.44
1727	do	J. F. Jackson, Riverside	27.97
1787	do	E. E. Cole, Redlands	29.00
1804	do	E. A. Phillips, Del Rosa	26.69
1827	do	C. D. Hubbard, San Fernando	27.85
1847	do	S. W. Hains, Chula Vista	27.31
1870	do	W. F. Sechrest, Escondido	27.04
1893	do	John McInery, Pomona	28.36
1926	do	J. F. Jackson, Riverside	29.15
1981	do	J. A. McKinney, Colton	26.87
1984	do	F. D. Hudson, Riverside	28.53
2002	do	Johnston Fruit Co., Santa Barbara	30.04
	Guaranteed		24.14
1736	Lawn	J. F. Jackson, Riverside	24.92
	Guaranteed		29.10
1737	Nitrate of Soda	do	54.91
1810	do	I. W. Freeman, Upland	55.30
	Guaranteed		52.50
1853	Nitrate of Soda	Arlington H'ts Fruit Co., Riv'side	54.81
1864	do	do	54.25
	Guaranteed		55.44
1811	Nursery	I. W. Freeman, Upland	28.42
	Guaranteed		28.65
1759	Special	Wm. A. Suessmilch, Upland	36.37
	Guaranteed		35.36
1824	Special	Jas. E. Shaw, Riverside	48.69
	Guaranteed		47.40
1895	Special	F. L. Paluser, N. Pomona	26.61
	Guaranteed		25.90
2000	Special	O. J. Stowe, Fillmore	23.33
	Guaranteed		20.40
1788	Special Fruiting	E. E. Cole, Redlands	34.23
1812	do	I. W. Freeman, Upland	30.47
1894	do	J. B. Johnston, Pomona	32.04
	Guaranteed		29.75
1729*	Tankage	J. F. Jackson, Riverside	32.87
1871*	do	W. F. Sechrest, Escondido	29.07
	Guaranteed		33.08
1789*	Tankage	E. E. Cole, Redlands	38.12
	Guaranteed		37.40
1813*	Tankage	I. W. Freeman, Upland	32.55
	Guaranteed		33.19
1896*	Tankage	Placentia Fruit Co., Placentia	33.22
	Guaranteed		32.74
2001*	Tankage	Johnston Fruit Co., Santa Barbara	33.42
	Guaranteed		33.08

*1729—69% fine.

*1871—71% fine.

*1789—90% fine.

*1813—74% fine.

*1896—65% fine.

*2001—71% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number	POUNDS PER HUNDRED,											
	PHOSPHORIC ACID.				NITROGEN.					POTASH.		
	Available	Insoluble	Total	Guaranteed as Derived from	In Nitrates	In Ammonia Salts	Organic	Organic Nitrogen Guaranteed as Derived from	Total	From Muriate	From Sulphate	Total
1726	6.31	3.50	9.81	Bn G Super T	0.89	0.56	1.98	Bn G T	3.43		3.39	
1727	8.08	5.70	13.78		0.51	0.14	2.28		2.93		3.35	
1787	7.03	4.91	11.94		0.42	0.34	2.55		3.31		4.34	
1804	7.73	2.08	9.81		0.96	0.68	1.63		3.27		3.37	
1827	5.87	4.59	10.46		0.69	0.15	2.71		3.55		3.92	
1847	6.58	4.81	11.39		0.66	0.41	2.27		3.34		3.45	1.92
1870	4.57	7.83	12.40		0.77	0.32	1.96		3.05		4.96	0.95
1893	6.80	7.13	13.93		0.35	0.27	2.45		3.07		3.87	
1926	6.20	11.47	17.67		0.36	0.27	2.53		3.16		3.02	
1981	6.35	4.44	10.79		0.52	0.69	2.24		3.45		3.14	
1984	6.30	8.76	15.06	Bn G Super T	0.17	0.18	2.81	Bn G T	3.16		3.42	0.88
2002	8.64	4.38	13.02		0.39	0.54	2.65		3.58		2.98	
	7.00	1.50	8.50		0.75	0.60	1.65		3.00		3.00	
1736	4.20	4.13	8.33		0.85	0.31	3.13		4.29		1.00	
	6.00	2.00	8.00		1.00	1.00	3.00		5.00		1.50	
1737					15.69				15.69			
1810					15.80				15.80			
					15.00				15.00			
1853					15.66				15.66			
1864					15.50				15.50			
					15.84				15.84			
1811	5.50	2.58	8.08	BnG,	0.63	0.90	3.32	Bn, G	4.85	1.73		
	6.00	1.50	7.50	Super	1.00	1.00	3.00	T	5.00	1.50		
1759	5.54	6.26	11.80	BnG,	1.15	0.31	4.00	Bl, Bn	5.46		4.55	1.06
			12.55	Super	1.00	1.00	3.25	T, G	5.25		4.35	
1824			4.81	Phos- phate BnG, Super	1.24	1.73	8.00	G	10.97		1.90	
			7.00				10.00		10.00		1.50	
1895	12.14	24.10	36.24									
	12.00	23.00	35.00									
2000	19.44	0.28	19.72									
	17.00											
1788	7.45	6.48	13.93		0.96	0.52	2.90		4.38		4.35	
1812	8.73	5.68	14.41	BnG,	0.36	0.47	2.42		3.25		3.77	
1894	7.27	7.91	15.18	Super	1.65	0.37	2.04	Bn, G	4.06		3.41	
	8.00	1.50	9.50	T	1.00	0.75	2.25	T	4.00		3.50	
1729			13.73	Phos- phate BnG, Super			5.70	G	5.70			
1871			13.92				4.67		4.67			
			13.75				5.75		5.75			
1789			14.25				6.68		6.68			
			13.75				6.60		6.60			
1813			12.22				5.90		5.90			
			13.75				5.75		5.75			
1896			12.94				6.05		6.05			
			13.75				5.75		5.75			
2001			19.94				4.55		4.55			
			13.75				5.75		5.75			

ANALYSES AND VALUATIONS—Continued.

Laboratory Number.	NAME AND ADDRESS OF MANUFACTURER OR DEALER, AND NAME OF BRAND.	FROM WHOM OBTAINED.	Value per Ton at Station Prices
	Union Superphosphate Co., San Francisco, Cal.		
1901	Superphosphate	Wm. Winter, Modesto	22.35
	Guaranteed		20.40
1902	Superphosphate	do	7.38
	Guaranteed		12.00
1907	Superphosphate	do	17.89
	Guaranteed		14.40
1967	Superphosphate	Piru Oil & Land Co., Piru	20.09
	Guaranteed		19.20
1999	Superphosphate	O. J. Stowe, Fillmore	21.79
	Guaranteed		21.00
	Woodbridge Chem'l Works, L.A.		
1766	Citrus A	J. H. Reynolds, Redlands	30.34
	Guaranteed		29.30
1768	Citrus B	do	22.52
	Guaranteed		22.10
1735	Lawn	Factory	17.12
	Guaranteed		16.80
1758	Nursery	J. H. Reynolds, Redlands	25.12
	Guaranteed		29.70
1767	Orange and Lemon No. 1	do	25.96
1936	do	W. J. Korn, Redlands	32.79
	Guaranteed		29.50
1983	Orange and Lemon No. 1	A. C. Denman & Son, Bryn Mawr	26.30
	Guaranteed		30.50
1750	Special	J. H. Reynolds, Redlands	24.88
	Guaranteed		25.60
1962*	Special Citrus B	A. C. Denman & Son, Bryn Mawr	26.64
	Guaranteed		20.30
1765	Summer Special	J. H. Reynolds, Redlands	25.13
	Guaranteed		27.70
1972	Superphosphate	L. W. Fox, Colton	19.98
	Guaranteed		19.20
1757*	Tankage	J. H. Reynolds, Redlands	18.19
	Guaranteed		24.20
1927*	Tankage	D. J. Carpenter, Highland	28.45
	Guaranteed		29.70
1961*	Tankage	G. Palmtag, Redlands	36.64
	Guaranteed		30.50
	Woodbridge Fertilizer Co., San Bernardino.		
1801	Lemon	Factory	24.84
	Guaranteed		21.40
1802	Special	Factory	28.86
	Guaranteed		28.10
1803*	Special	Factory	31.73
	Guaranteed		41.89
1937	Nitrate of Soda	Wm. Buxton, Rialto	54.04
	Guaranteed		54.84
1947	Special	F. H. Coffeen, Pasadena	25.27
	Guaranteed		22.73

- *1962—Some hoof.

*1927—73% fine.

*1803—51% fine.

*1757—39% fine.

*1961—90% fine.

ANALYSES AND VALUATIONS—Continued.

Laboratory Number--	POUNDS PER HUNDRED.												
	PHOSPHORIC ACID.				NITROGEN.				POTASH.			Chlorin-----	
	Available----	Insoluble----	Total-----	Guaranteed as Derived From-----	In Nitrates--	In Ammonia Salts-----	Organic ---	Organic Nitrogen Guaranteed as Derived From-----	Total-----	From Muriate----	From Sulphate. --		Total-----
1901	18.63	2.55	21.18	Super	-----	-----	-----	-----	-----	-----	-----	-----	-----
	17.00	2.00	19.00		-----	-----	-----	-----	-----	-----	-----	-----	-----
1902	6.15	6.94	13.09		-----	-----	-----	-----	-----	-----	-----	-----	-----
	10.00	3.00	13.00		-----	-----	-----	-----	-----	-----	-----	-----	-----
1907	14.91	3.38	18.29		-----	-----	-----	-----	-----	-----	-----	-----	-----
	12.00	3.00	15.00		-----	-----	-----	-----	-----	-----	-----	-----	-----
1967	16.74	1.66	18.40	Super	-----	-----	-----	-----	-----	-----	-----	-----	-----
	16.00	-----	-----		-----	-----	-----	-----	-----	-----	-----	-----	-----
1999	18.16	1.30	19.46		-----	-----	-----	-----	-----	-----	-----	-----	-----
	17.50	-----	-----		-----	-----	-----	-----	-----	-----	-----	-----	-----
1766	6.71	5.36	12.07	BnG,	-----	-----	3.98	Bl, Bn	3.98	-----	3.07	-----	-----
	5.00	5.00	10.00	Super	-----	-----	4.00	G, T	4.00	-----	4.00	-----	-----
1768	6.12	4.24	10.36	Bn	-----	-----	2.21	Bl, Bn	2.21	-----	3.51	-----	-----
	5.00	5.00	10.00		-----	-----	2.50	G	2.50	-----	3.00	-----	-----
1735	-----	-----	8.25	BnG,	-----	-----	2.11	Bl, Bn	2.11	-----	1.73	-----	-----
	-----	8.00	8.00	Super	-----	-----	2.00	G	2.00	-----	2.00	-----	-----
1758	4.58	4.16	8.74	BnG	-----	-----	3.65	Bl, Bn	3.65	-----	2.59	-----	1.12
	4.00	4.00	8.00		-----	-----	5.00	G	5.00	-----	2.00	-----	-----
1767	5.10	3.22	8.32	BnG,	1.54	-----	1.77	-----	3.31	-----	4.80	-----	-----
	5.05	4.68	9.73		1.84	-----	2.69	Bl, Bn, G	4.53	-----	5.99	-----	0.56
1936	5.00	5.00	10.00	Super	2.00	-----	2.00	T	4.00	-----	5.00	-----	-----
1983	4.01	5.97	9.98	Bn,	1.64	0.16	1.50	Bl, Bn	3.30	-----	5.15	-----	0.92
	5.00	5.00	10.00	Super	-----	-----	4.00	T	4.00	-----	5.00	-----	-----
1750	5.71	3.83	9.54	BnG,	-----	-----	1.92	Bl, Bn	1.92	-----	7.02	-----	-----
	6.00	4.00	10.00		-----	-----	2.00	G	2.00	-----	7.00	-----	-----
1962	4.25	4.80	9.05	Super	0.33	0.10	3.11	-----	3.50	-----	4.32	-----	-----
	5.00	3.00	8.00	T	-----	-----	-----	T	2.00	-----	4.00	-----	-----
1765	4.21	5.77	9.98	BnG,	0.42	-----	2.43	Bl, Bn	2.85	-----	5.00	-----	-----
	5.00	5.00	10.00	Super	-----	-----	-----	G	3.00	-----	6.00	-----	-----
1972	16.65	2.49	19.14	Super	-----	-----	-----	-----	-----	-----	-----	-----	-----
	16.00	-----	-----		-----	-----	-----	-----	-----	-----	-----	-----	-----
1757	-----	-----	6.19		-----	-----	3.72	-----	3.72	-----	-----	-----	-----
	-----	8.00	8.00	-----	-----	5.00	-----	5.00	-----	-----	-----	-----	
1927	-----	-----	10.33	Super	-----	-----	5.23	-----	5.23	-----	-----	-----	-----
	-----	-----	13.00		-----	-----	5.00	-----	5.00	-----	-----	-----	-----
1961	-----	-----	14.60		-----	-----	6.21	-----	6.21	-----	-----	-----	-----
	-----	-----	13.00	-----	-----	5.00	-----	5.00	-----	-----	-----	-----	
1801	8.09	1.66	9.75	Super	2.22	-----	-----	-----	2.22	-----	5.45	-----	0.75
	8.00	-----	-----		2.00	-----	-----	-----	2.00	-----	4.00	-----	-----
1802	7.05	1.47	8.52	Super	2.68	-----	0.47	-----	3.15	-----	7.00	-----	-----
	7.00	1.00	8.00		-----	-----	-----	Bl	3.00	-----	6.00	-----	-----
1803	7.66	13.90	21.56	Bn,	-----	-----	4.26	-----	4.26	-----	-----	-----	-----
	19.20	-----	-----	Super	-----	-----	5.15	Bl, Bn	5.15	-----	-----	-----	-----
1937	-----	-----	-----	Super	15.44	-----	-----	-----	15.44	-----	-----	-----	-----
	-----	-----	-----		15.67	-----	-----	-----	15.67	-----	-----	-----	-----
1947	8.77	1.10	9.87	Super	2.06	-----	-----	-----	2.06	-----	5.82	-----	0.62
	8.00	0.25	8.25		2.00	-----	-----	-----	2.00	-----	5.00	-----	-----

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